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09/931,526	08/16/2001	Arindam Das-Purkayastha	B-4274 618998-3	3735

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EXAMINER

CHAI, LONGBIT

ART UNIT	PAPER NUMBER
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2131

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/931,526

Applicant(s)

DAS-PURKAYASTHA ET AL.

Examiner

Longbit Chai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 7-61 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1 – 6 have been presented for examination. Claims 1 and 6 have been amended; and new claims 7 – 61 have been added in an amendment filed 12/14/2004.

#### ***Restriction***

2. Newly amended and submitted claims 7 – 61 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions original claims 1 – 6 and newly amended and submitted claims 7 – 61 are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable.

In instant case, invention newly submitted claims 7 – 61 disclose a method of deriving the integrity metric by the trusted device that controls the boot process based on the calculations and configurations from group of hardware and software components including BIOS, ROM, operating system loader and entities and validating those authenticated values provided by a trusted 3<sup>rd</sup> party using the nonce (i.e. random number) and private encryption key, and the claims belong to class 713/161. However, the previous claims disclose using the value of the integrity metric of a trusted device to assign a trust level to the computer entity, which belongs to class 713/200, which relates to computer security. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, Newly submitted claims 7 – 61 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Response to Arguments***

3. Applicant's arguments with respect to the subject matter of the original presentation of claims 1 – 6 have been fully considered but are not persuasive.

As per claim 1, Applicant argues "Saudi discloses none of the secrets as being a measurement relating to the integrity of the trusted device of a computing entity to which it relates, and therefore none of these secrets are, or are capable of performing the functions of, an integrity metric as claimed" (Page 13, 2<sup>nd</sup> Paragraph, Line 5 – 8).

Examiner notes the integrity metric is interpreted as the value that can enforce the desired level of protection (i.e. authentications) such as the device unique serial number, firmware version number, device private signature key (Saudi: see for example, Column 16 Line 45 – Column 17 Line 7 & Figure 24 Element 240); and this trust device is associated a computer entity (Saudi: see for example, Column 7 Line 45 – 47). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant further argues "Austel does not disclose calculating an integrity metric and does not teach determining of trust in one computer entity by another computer entity" (Page 15 Line 1 and Page 15 Line 14). Examiner notes Applicant's argument has no merit since the alleged limitation has not been recited into the claim as to calculating an integrity metric. Furthermore, Examiner notes Saudi is relied upon to provide the integrity metric and Austel is relied upon assigning integrity access class (i.e. trust level) through an independent external evaluation process which is selected from the group consisting of Common Criteria EAL levels (Austel: see for example, Column 13 Line 33 – 36 & Figure 8).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudia (Patent Number: 6009177), hereinafter referred to as Sudia, in view of Austel (Patent Number: 6430561), hereinafter referred to as Austel, and evidenced by ISO/IEC-15408 ("Common Criteria for Information Technology Security Evaluation", August.1999), hereinafter referred to as ISO/IEC-15408.

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2. As per claims 1 and 6, Sudia teaches computer apparatus comprising a receiver for receiving an integrity metric for a computer entity via a trusted device associated with the computer entity, the integrity metric having values for a plurality of characteristics associated with the computer entity (Sudia: for example, Column 16 Line 50 – 67 and Column 44 Line 31 – 55 and Figure 24 Elements 240/241/248);

3. Sudia does not teach a controller for assigning a trust level to the computer entity from a plurality of trust levels, wherein the assigned trust level is based upon the value of at least one of the characteristics of the received integrity metric.

4. Austel teaches a controller for assigning a trust level to the computer entity from a plurality of trust levels, wherein the assigned trust level is based upon the value of at least one of the characteristics of the received integrity metric (Sudia: for example, Column 13 Line 33 – 36 and Figure 8).

5. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Austel within the system of Sudia because Austel teaches the prevention of tampering and unauthorized modification to files (Austel: see for example, Column 6 Line 39 – 40).

6. This is also evidenced by ISO/IEC-15408 (ISO/IEC-15408: for example, Common Criteria Part I Section 4.1.1 5<sup>th</sup> Paragraph).

7. As per claim 2, Sudia as modified teaches the claimed invention as described above (see claim 1). Sudia as modified further teaches the trusted device is arranged

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to acquire an integrity metric of the computer entity (Sudia: for example, Column 16 Line 50 – 67 and Column 44 Line 31 – 55 and Figure 24 Elements 240/241/248).

8. Claims 3 – 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sudia (Patent Number: 6009177), hereinafter referred to as Sudia, in view of Austel (Patent Number: 6430561), hereinafter referred to as Austel, and in view of Trostle (Patent Number: 5919257), hereinafter referred to as Trostle.

9. As per claim 3, Sudia as modified teaches the claimed invention as described above (see claim 1). Sudia as modified does not teach the trust level is determined by comparing the value of the at least one characteristics with a specified value.

10. Trostle teaches the trust level is determined by comparing the value of the at least one characteristics with a specified value (Trostle: for example, Column 2 Line 3 – 7).

11. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Trostle within the system of Sudia because Trostle teaches detecting unauthorized changes to files (Trostle: see for example, Column 1 Line 13 – 15).

12. As per claim 4, Sudia as modified teaches the claimed invention as described above (see claim 1). Sudia as modified further teaches the plurality of trust levels are determined base upon a plurality of specified values associated with a plurality of

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characteristics of a computer entity (Trostle: see for example, Column 2 Line 3 – 7, Column 5 Line 5 – 7 and Column 5 Line 12 – 16).

13. As per claim 5, Sudia as modified teaches the claimed invention as described above (see claim 1). Sudia as modified further teaches the plurality of trust levels are determined based upon a plurality of specified values associated with characteristics for a plurality of computer entities (Trostle: see for example, Column 3 Line 10 – 13, Column 3 Line 20 and Figure 1 Element 12).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788.


The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai  
Examiner  
Art Unit 2131

  
LBC

  
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